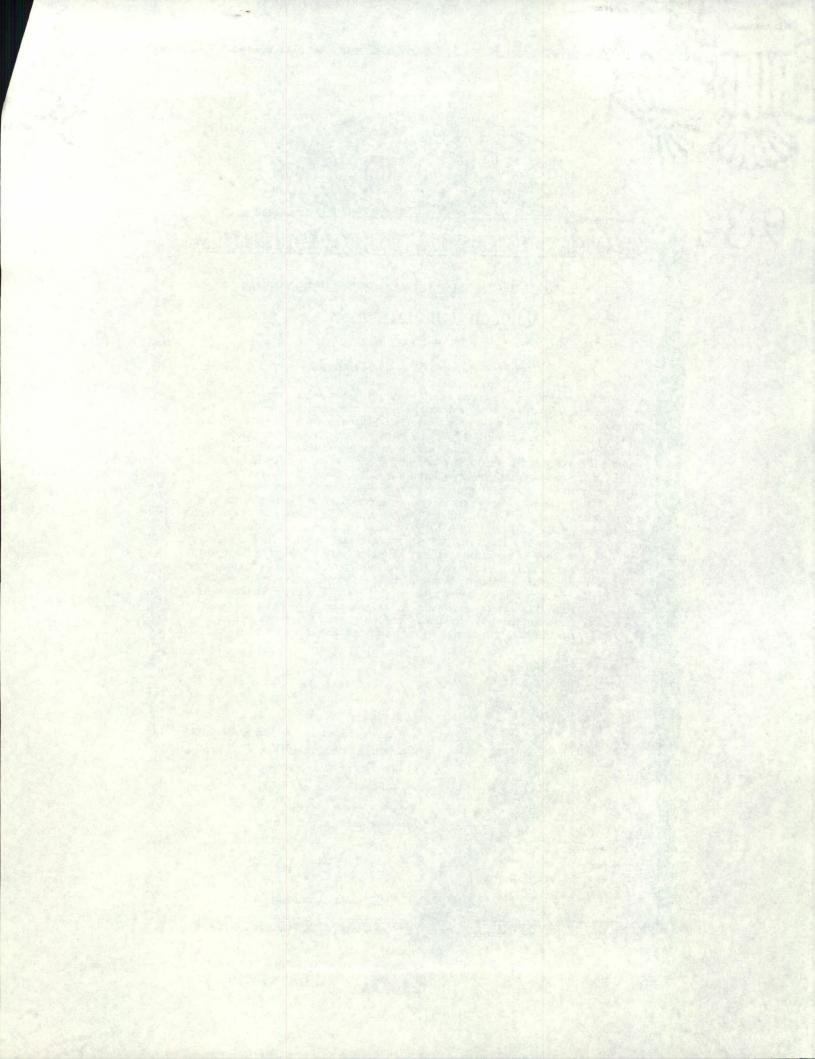
8300085 No. TO ALL TO WHOM THESE PRESENTS SHALL COME; Teheco-handelsraad Colherens, There has been presented to the Secretary of Agriculture AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW. NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF Eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC PED OF THE VARIETY IN A PUBLIC, REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXOTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT,
ORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. NITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.) BARLEY 'Bellona' In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington day of July this 26th the year of our Lord one thousand nine hundred and eighty-five. Variety Protection Office T I A X A A X A A X A A AXXXXX



U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE			FOF	FORM APPROVED: OMB NO.0581-005		
	PLANT VARIETY PROT		may	certificate for plant variety protection be issued unless a completed appli n form has been received (5 U.S.C		
1. NAME OF APPLICANT(S)	(manacions on reverse)	2. TEMPORARY DESIGNATION	_	ARIETY NAME		
Cebeco-Handelsraa	d	Cebeco 7931		LONA		
4 ADDRESS (Street and No. or F	F.D. No., City, State, and Zip Code		-	FOR OFFICIAL USE ONLY		
Blaak 31 P.O. Box 182 3000 AD Rotterdam	3	10-544911	PVP	PVPO NUMBER 8300085		
6. GENUS AND SPECIES NAME		AME (Botanical)	+	DATE		
Hordeum vulgare L	Gramineae		FILING	3/28/83 TIME 9:30 \(\textbf{A.M.} \) P.M.		
8. KIND NAME		DATE OF DETERMINATION		AMOUNT FOR FILING		
spring barley		1977	RECEIVED	\$ 1,000 DATE 3/28/83		
10. IF THE APPLICANT NAMED partnership, association, etc.) agricultural coope			FEES RE	\$500.00		
	Rotterdam, The Netherlands			Julylst, 1899		
a. Exhibit A, Origin and Bro Section 52 of the Plant V		c. Exhibit C, Objective from Plant Variety F	rotectio			
A STATE OF THE STA		RIETY BE SOLD BY VARIETY NAI				
SEED? (See Section 83(a) of 1	he Plant Variety Protection Act.)	Yes (If "Yes," answe	r items	16 and 17 below) No		
LIMITED AS TO NUMBER OF	PECIFY THAT THIS VARIETY BE GENERATIONS?	BEYOND BREEDER SI	ED?	CLASSES OF PRODUCTION		
Yes 18. DID THE APPLICANT(S) FIL	No	X Foundation		egistered X Certified		
- The Netherlands - France	04.01.1980 De 02.06.1982	enmark 15.01.1981	UNTRI	Yes (If "Yes," give name: of countries and dates)		
- West Germany	26.11.1980 TED IN THE U.S. OR OTHER COU	NTRIES?		No		
The Netherlands	08.06.1982			Yes (If "Yes," give name: of countries and dates)		
20. The applicant(s) declare(s)	that a viable sample of basic see	ds of this variety will be furnished	d with	No the application and will be re-		
plenished upon request in a The undersigned applicant(: distinct, uniform, and stable Variety Protection Act.	ccordance with such regulations s) is (are) the owner(s) of this se e as required in Section 41, and	as may be applicable. Exually reproduced novel plant visentitled to protection under t	ariety, a	and believe(s) that the variety is isions of Section 42 of the Plant		
SIGNATURE OF APPLICANT	Nationale cooperatieve	in can jeopardize protection and	-	in penalties. ATE		
	vereniging voor land	- en tuinbouw b,a.		ROTTERDAM, 23 FEB. 1983		
SIGNATURE OF APPLICANT	CEBECO-HAI	VIELSKAMI	D	ATE .		
				1		

FORM LMGS-470 (9-81) (Edition of 1-78 is obsolete)

NOTE: THERE HAS BEEN A CHANGE IN THE FEES.

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$1,000 fee (\$500 filing fee and \$500 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain, and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. [See section 180.175 of the Regulations and Rules of Practice (as amended November 8, 1982).] Retrain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

Item

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- If "Yes" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



11



CEBECO-HANDELSRAAD

EXHIBIT A

Origin and breeding history of the variety

Bellona was selected from the cross

Aramir x (Aramir x Bomi)

This cross was made in 1971. After multiplying the population out of this cross during 4 years single plants were selected in the field. This single plant selection was followed by earrow and earrow progeny selection combined with replicated yield trials. This selection resulted in 19 identical earrow progenies which were used as a basis of the new variety BELLONA.

Maintenance: The variety is maintained by means of line selection.

Multiplication scheme:

- 1. breeders seed grown at the plant breeding station
- prebasic seed grown and field inspected at the plant breeding station and/or at multiplication farms (seed growers)
- basic seed grown and field inspected at multiplication farms (seed growers)
- 4. certified seed (C_1) grown and field inspected at multiplication farms (seed growers).

Results of official D.U.S. tests in The Netherlands (RIVRO) and France (INRA/GEVES) showed that BELLONA is a uniform and stable variety.

No variants have been observed during the seed increase of BELLONA to date.

Exhibit B

PLANT VARIETY PROTECTION CERTIFICATE NO. 8300085, "BELLONA" BARLEY

Novelty Statement - Revised 20 April 1985

Novelty of Bellona is based on the unique combination of characteristics, as summarized in Exhibit D. (additional description of the variety) and the official description drawn up by the Dutch Board for Plant Breeder's Rights. Bellona is a two rowed spring barley of mid-season maturity and short stature.

Bellona most closely resembles the varieties Menuet and Piroline.

Bellona differs from Menuet:

- by having no spicules on the inner lateral nerves of lemma while Menuet has.
- by having a long haired rachilla, while Menuet has a short haired rachilla.

Bellona differs from Piroline:

- by having a long haired rachilla while Piroline has a short haired rachilla.
- by having no spicules on the inner lateral nerves of lemma while Piroline shows a weak spiculation.
- by having no spicules on the outer lateral nerves of lemma and the lemma margin while Piroline has.

As evidence of the novelty of the variety Bellona we enclose a translation of the official report of the D.U.S. tests of this variety, carried out by the Dutch authorities (RIVRO), as well as a translation of the official Certificate of Registration of Bellona.

OF A TILITURE

EXHIBIT B. PVP APPLICATION NO. 830005, "BELLONA" BARLEY

APPENDIX A

		VARIETY		
		Bellona	Menuet	Piroline
1.	Spicules present on innerlateral nerves of lemma	absent	present	present, weak
2.	Spicules on outer lateral nerves of lemma margin	absent		present
3.	Size of rachilla	long	short	short
4.	Rachilla hairs	present	present	present





RAAD VOOR HET KWEKERSRECHT

BEWIJS VAN INSCHRIJVING

voor een ras van het gewas

Zomergerst

De Raad voor het Kwekersrecht verklaart,

dat op aanvrage nummer GRS 276

ingediend op 4 januari 1980 te 24.00 uur,

het hierna beschreven ras op 8 juni 1982

onder volgnummer 5820

en onder de benaming Bellona

in het Nederlands Rassenregister is ingeschreven met aantekening van verlening van kwekersrecht

ten name van Cebeco-Handelsraad

Postbus 182

3000 AD Rotterdam

Wageningen, 1 juli 1982

De Raad voor het Kwekersrecht,

sekretaris.



476. Zomergerst - 23.2

RIJKSINSTITUUT VOOR HET RASSENONDERZOEK VAN CULTUURGEWASSEN

Rapport betreffende het ras Bellona, GRS 276

april 1982

Aanvraag volgens art. 35 Z.P.W.

Aanvrager : Cebeco-Handelsraad, Rotterdam.

Datum van aanvraag : 4 januari 1980.

Ontstaan : volgens het beschrijvingsblad is het ras ontstaan uit

de kruising : Aramir x Aramir x Bomi.

Plaatsen en jaren van onderzoek : Wageningen 1980 en 1981

Dronten 1980 en 1981.

In de combinatie van kenmerken in de rasbeschrijving toont het ras geen overeenkomst met andere ons bekende rassen.

Er zijn tijdens het onderzoek geen tekortkomingen ten aanzien van de homogeniteit en de bestendigheid geconstateerd.

Het is niet gebleken dat het ras voor de datum van aanvraag in het verkeer is gebracht.

Conclusies:

- 1. Bellona onderscheidt zich duidelijk van alle andere ons bekende rassen.
- 2. Het ras is voldoende homogeen.
- 3. Het ras is bestendig.
- 4. Op het tijdstip van aanvraag kon het ras als nieuw worden aangemerkt.

De deskundige :

- it ingredal.



Verzoekende instantie : Raad voor het Kwekersrecht,

Aanvraag no. : GRS 276

Wageningen

Rapporterende instantie : RIVRO, Wageningen

Gewas

: zomergerst

Voorl. aanduiding : Cebeco 7931

Benaming

: Bellona

Type

: tweerijige zomergerst.

Halm

: kort.

: aan de zich strekkende halm smal, tamelijk zwak hangend, tamelijk

donkergroen met roodkleuring in bladschede en oortjes.

Aar

: tamelijk lang, tamelijk smal met aan de top middelmatig sterk ge-

kleurde kafnaalden; aanvankelijk rechtopstaand en tijdens de rijping

hangend.

Aarspil met tamelijk lange leden.

Korrel : met lang behaarde rhachilla, onbehaarde randen langs de groeve, onge-

tande binnenste zijnerven en met gekleurde nerven tijdens de rijping.

Het ras komt tamelijk laat in aar.

Verschil met andere rassen :

De beschrijving kenmerkt het ras.



TRANSLATION

The Board for the Plant Breeder's Rights

CERTIFICATE OF REGISTRATION

for a variety of the crop

spring barley

The Board for the Plant Breeder's Rights declares,

that with registration number

GRS 276

submitted on

4th of January 1980 at 24.00 hrs

the variety described hereafter on

8th of June 1982

under serial number

5820

and with the denomination

Bellona

has been entered into the Netherlands Register of Plant Varieties

with annotation of grant of Plant Breeder's Rights

in the name of

Cebeco-Handelsraad

P.O. Box 182

3000 AD Rotterdam

Wageningen,

lst of July 1982

The Board for the Plant Breeder's Rights

Secretary



476. Spring barley - 23.2

GOVERNMENT INSTITUTE FOR RESEARCH ON VARIETIES OF CULTIVATED PLANTS

Report regarding the variety Bellona, GRS 276

April 1982

Application in accordance with art. 35. Z.P.W.

Applicant:

Cebeco-Handelsraad, Rotterdam

Application date:

4th January 1980

Origin:

· according to the technical questionnaire

the variety was selected from the cross:

Aramir x Aramir x Bomi.

Places and years of testing: Wageningen 1980 and 1981

Dronten 1980 and 1981.

In the combination of characters in the official description the variety doesn't show any similarity to other varieties known to us.

During the testing years no shortcomings with respect to the uniformity and the stability were observed.

It didn't appear that the variety has been commercialized before the date of application.

Conclusions:

- 1. Bellona is clearly distinct from all other varieties known to us.
- 2. The variety is sufficiently uniform
- 3. The variety is stable.
- 4. At the moment of application the variety could be considered as being new.

The Expert:



DESCRIPTION 8300085

Requesting Authority: The Board for the Plant Breeder's Rights, Wageningen

Reporting Authority: RIVRO, Wageningen

Application Nr.: GRS 276

Crop:

spring barley

Breeders' reference:

Cebeco 7931

Denomination:

Bellona

Species:

two-rowed spring barley

Stem:

short

Leaf:

during stem elongation narrow, rather weakly hanging,

rather dark green with anthocyanin coloration in leaf

sheath and auricles.

Ear:

rather long, rather narrow with on top moderately strong

anthocyanin coloration of the awns; initially erect and semi-

drooping during ripening.

Rachis with rather long segments.

Grain:

rachilla hair type: long

hairiness of ventral furrow: absent

spiculation of inner lateral nerves of lemma: absent

anthocyanin coloration of nerves during ripening: present.

Heading date: rather late.

Difference from other varieties:

This description characterizes the variety.



UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C (Barley)

OBJECTIVE DESCRIPTION OF VARIETY

Cebeco-Handelsraad	FOR OFFICIAL USE ONLY
LEDECO-HANGEISTAAG ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	PVPO NUMBER 8300085
Blaak 31, P.O. Box 182	VARIETY NAME OR TEMPORARY
3000 AD Rotterdam, The Netherlands	BELLONA BELLONA
Place the appropriate number that describes the varietal character of this variety in the Place a zero in first box (i.e. 089 or 09) when number is either 99 or less of	ne boxes below. or 9 or less.
I. GROWTH HABIT:	
1 = SPRING 2 = FACULTATIVE WINTER 3 = WINTER 2-4 Early Growth:	1 = PROSTRATE 2 = SEMIPROSTRATE 3 = ERECT 4 = Semi-erect
2. MATURITY (50% XFX (www.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	(see appendix I)
2 1 = EARLY (California Mariout) 2 = MIDSEASON (Betzes) 3 = LATE (Frontier)	
No. of days Earlier than	3 = CONQUEST 4 = DICKSON
4 No. of days Later than	N
3, PLANT HEIGHT (From soil level to top of head):	
2 1 = SEMIDWARF 2 = SHORT (California Mariout) 3 = MEDIUM TALL (Betzes)	4 = TALL (Conquest)
1 1 Cm. Shorter than 1 1 = BETZES 2 = CALIFORNIA MARIOUT	
Cm. Taller than	AN
STEM:	
2 Exertion (Flag to spike at maturity): 3 = 10 - 15 cm. 2 = 3 - 10 cm. 2 Anthocyanin:	1 = ABSENT 2 = PRESENT
0 4 NO. OF NODES (Originating from node above ground) (4-5, depending or	n growing circumstances)
1 = CLOSED 2 = V-SHAPED 3 = OPEN 1 Shape of Necks	1 = STRAIGHT 2 = SNAKY 3 = OTHER (Specify)
5. LEAF:	1 = DROOPING
Basal leaf sheath (seedling): 1 = GLABROUS 2 = PUBESCENT 3 Position of flag	leaf (at boot stage): 2 = UPRIGHT
	3= horizontal "H (First leaf below flag leaf) (see appendix
3=WAXY	leaf sheath: 1 = ABSENT 2 = PRESENT
6. HEAD:	
	1 = LAX 2 = ERECT (Not dense) 3 = ERECT (Dense)
\	1 = ABSENT (Glossy) 2 = SLIGHTLY WAXY 3 = WAXY
Lateral Kernels Overlap: 1 = NONE 2 = AT TIP 3 = 1/4 - 1/2 OF HEAD Rachis (Hair on	edge): 1 = LACKING 2 = FEW 3 = COVERED
7. GLUME:	
3 Length: 1 = 1/3 OF LEMMA 2 = 1/2 OF LEMMA 3 = MORE THAN 1/2 OF LEMMA 3 Hairs: 1 = No	ONE 2 = SHORT 3 = LONG
Hair covering: 1 = NONE 2 = RESTRICTED TO MIDDLE 3 = CONFINED TO	BAND 4 = COMPLETELY COVERED
Awns: 1 = LESS THAN EQUAL TO LENGTH OF GLUMES 2 = EQUAL TO LENGTH OF GLUMES	GTH OF GLUMES
3 Awn Surface: 1 = SMOOTH 2 = SEMISMOOTH 3 = ROUGH	
FORM LPGS-470-5 (8-80) (Replaces edition dated 4-78 which may be used)	8500087 11

8. LEMMA:		the second second second	The second secon
5 Awn: 1 = AWNL 3 = SHOR	LESS 2 = AWNLETS ON CENTRAL ROOM OF TON CENTRAL ROWS, AWNLETS ON IN G (longer than spike) 6 = HOODED	OWS, AWNLESS ON LATERA LATERAL ROWS 4 = SHO	AL ROWS RT (less than equal to length of spike)
3 Awn Surface: 0 = A	WNLESS 1 = SMOOTH 2 = SEMIS	MOOTH 3 = ROUGH	
Teeth: 1 = ABSENT	2 = FEW 3 = NUMEROUS	1 Hair: 1 = ABSEN	T 2 = PRESENT
I I Shape of base:	EPRESSION 2 = SLIGHT CREASE RANSVERSE CREASE	2 Rachilla Hairs: 1	SHORT 2 = LONG
9. STIGMA:			
2 Hairs: 1 = FEW	2 = MANY		
10. SEED:			
2 Type: 1 = NAKED	2 = COVERED	1 Hairs on Ventral Fur	row: 1 = ABSENT 2 = PRESENT
	T (8.0 mm.) 2 = SHORT TO MIDLONG ONG TO LONG (9.0 - 10.5 mm.)		LONG (8.5 - 9.5 mm.) G (10.0 mm.)
4 Wrinkling of hull:	= NAKED 2 = SLIGHTLY WRINKLE	ED 3 = SEMIWRINKLED	4 = WRINKLED
Aleurone Color: 1	= COLORLESS (White or Yellow) 2 =	BLUE	
Q 2 PERCENT ABOR	TIVE	+ 4 9 GMS. PER 1000	SEEDS
11. DISEASE: (0 = Not Tes	ted, 1 = Susceptible, 2 = Resistant)	and the same that the same of the same and t	
0 SEPTORIA	2 NET BLOTCH	2 SPOT BLOTCH	1 POWDERY MILDEW
1 LOOSE SMUT	0 BACTERIAL BLIGHT	1 COVERED SMUT	1 FALSE LOOSE SMUT
0 STEM RUST	1 LEAF RUST	1 SCAB	1 SCALD
O AY	0 BSMV	1 BYDV	OTHER (Specify)
12. INSECT: (0 = Not tested	, 1 = Susceptible, 2 = Resistant)		
O GREEN BUG	0 ENGLISH GRAIN APHID	O CHINCH BUG	0 ARMYWORM
O GRASS HOPPERS	O CERIAL LEAF BETTLE	OTHER (Specify)	
HESSIAN FLY RACE		0 B 0 C	
) U E	G G	
13. CHEMICAL (0 = Not Tes	ted, 1 = Susceptible, 2 = Resistant)		
DDT	OTHER (Specify)		
14. INDICATE WHICH VAR	IETY MOST CLOSELY RESEMBLES THA	AT SUBMITTED:	
CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Menuet	Seed size	Pirouette
Leaf size	Georgie	Coleoptile elongation	Piroline
Leaf color *	Piroline	Seedling pigmentation	Georgie
Leaf carriage	Trumpf		
terms used 1. Wiebe,	ing publications may be used as a refe in this form: G. A., and D. A. Reid, 1961, Classific , Technical Bulletin No. 1224, U.S. D	ation of Barley Varieties G	zation of character descriptions and

- Reid, D. A., and G. A. Wiebe, 1968, Barley: Origin, Botany, Culture, Winter Hardiness, Genetics, Utilization, Pests, Agriculture Handbook No. 338, U.S. Dept. of Agriculture. pp. 61 84.
 Malting Barley Improvement Association, Milwaukee, Wisconsin, 1971, Barley Variety Dictionary.

COLOR: Nickerson's or any recognized color fan may be used to determine color of the described variety.

FORM LPGS-470-5 (8-80) (REVERSE)

All data were observed in replicated trials in Holland!

TG/19/7 Barley/Orge/Gerste, 81-10-26

APPENDIX 1

EXPLANATIONS AND METHODS/EXPLICATIONS ET METHODES/ ERLÄUTERUNGEN UND METHODEN

Ad/Add./Zu 1

Plant: growth habit

Plante: port au tallage

Pflanze: Wuchsform

erect/dressé/aufrecht

semi-erect/demi-dressé/halbaufrecht

intermediate/demi-dressé à demi-étalé/mittel

semi-prostrate/demi-étalé/halbliegend

prostrate/étalé/liegend

The growth habit should be assessed visually from the attitude of the leaves and tillers. The angle formed by the outer leaves and the tillers with an imaginary middle axis should be used.

Le port doit être déterminé visuellement d'après le port des feuilles et des talles. On utilisera l'angle formé par les feuilles externes et les talles avec un axe central imaginaire.

Die Wuchsform sollte auf Grund der Haltung der Blätter und Triebe visuell erfasst werden. Der von den äusseren Blättern und Trieben mit einer imaginären Mittelachse gebildete Winkel sollte verwendet werden.

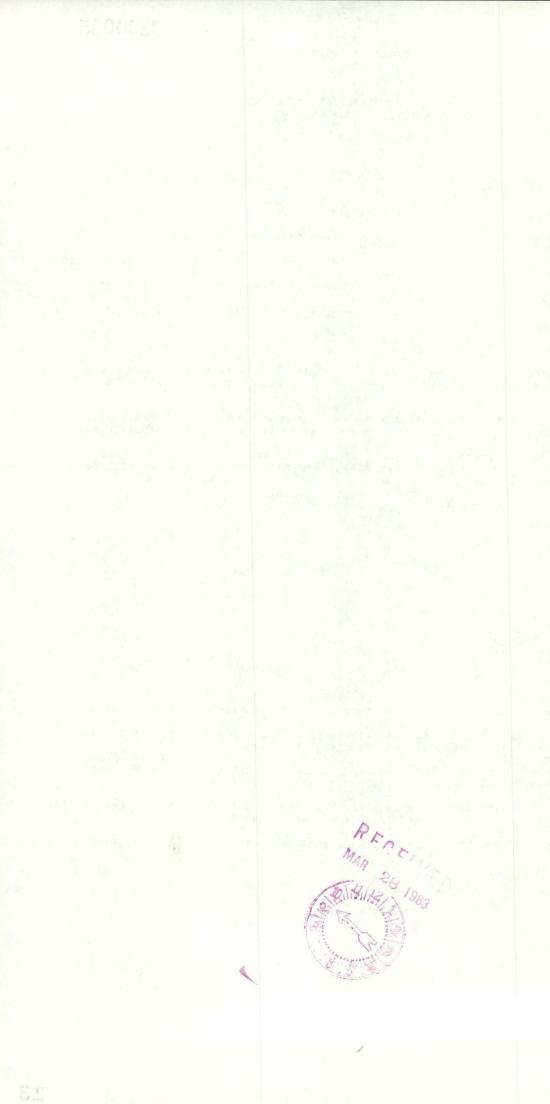
Ad/Add./Zu 3

Flag leaf: attitude

Dernière feuille: port

Oberstes Blatt: Haltung

- all leaves are rectilinear/toutes les feuilles sont dressées/alle Blätter sind gerade
- about 1/4 of the plants with recurved leaves/environ 1/4 des plantes ont des feuilles retombantes/etwa 1/4 der Pflanzen mit gebogenen Blättern
- about 1/2 of the plants with recurved leaves/environ 1/2 des plantes ont des feuilles retombantes/etwa die Hälfte der Pflanzen mit gebogenen Blättern
- about 3/4 of the plants with recurved leaves/environ 3/4 des plantes ont des feuilles retombantes/etwa drei Viertel der Pflanzen mit gebogenen Blättern
- 9. all leaves are recurved/toutes les feuilles sont retombantes/alle Blätter sind gebogen.



TG/19/7 Barley/Orge/Gerste, 81-10-26

8300085

APPENDIX 2

Ad/Add./Zu 11

Ear: attitude

Epi: port

Ähre: Haltung



erect droit aufrecht



semi-erect légèrement incurvé geneigt



horizontal demi-incurvé

waagerecht



semi-drooping incurvé

überhängend U



drooping très incurvé

stark überhängend

Ad/Add./Zu 14

Ear: shape

Epi: forme

Ähre: Form



tapering pyramidal pyramidenförmig



parallel à bords parallèles parallel



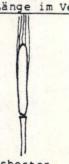
fusiform fusiforme spindelförmig

Ad/Add./Zu 16

Awn: length compared to ear

Barbe: longueur par rapport à l'épi

Granne: Länge im Verhältnis zur Ähre



shorter plus courte kürzer



equal de même longueur gleich lang



longer plus longue länger



BELLONA

ORIGIN Aramir x Aramir x Bomi

PLANT

1. Growth habit at tillering:

2. Basal leaf sheaths:

3. Leaf size:

4. Leaf attitude (carriage):

5. Flag leaf attitude:

6. Anthocyanin coloration of the auricles:

7. Colour of the leaves:

8. Glaucosity (waxiness) of leaf sheaths:

9. Exertion (flag to spike):

10. Plant height:

EAR

11. Ear glaucosity:

12. Number of rows:

13. Ear length:

14. Ear shape:

15. Presence of awns:

16. Awn length:

17. Anthocyanin coloration of the
 awn tips:

18. Ear density:

19. Awn-spiculation of the central

20. Awn-spiculation of the margins:

21. Ear attitude at ripening:

RACHIS

22. Size of first segment:

23. Curvature of first segment:

24. Humping of segment (mid-third of ear):

25. Shape of segments (mid-third
 of ear):

26. Hairiness of segment margins:

27. Shoulder hairs:

28. Hairs on concave surface:

29. Interglume hairs:

Intermediate - semi prostrate

glabrous and weakly pigmented rather long and rather narrow

intermediate

horizontal

medium to strong

medium green

strong

medium (+ 3.5 cm)

medium

medium to strong

two

long (+ 10 cm)

parallel shaped (strap)

present

longer than length of ear (+ 4 cm)

strong

lax, D = 34.5

present

total, spicules rather widely spaced

recurved

rather long and broad

medium curved

medium

straight, and slightly flared

medium

medium to strong

absent absent

STERILE SPIKELET

30. Angle of sterile spikelet: divergent

31. Length of lemma: medium to long

32. Shape of tip: rounded

33. Hairiness of lemma (base): weak

34. Spiculation of the lemma: very weak

35. Colour of the rachilla: ochre36. Hairiness of the rachilla: weak

GRAIN

37. Grain type: type A

38. Rachilla hair type: long hairs

39. Presence of husk: present

40. Anthocyanin coloration of the nerves: strong to very strong

41. Spiculation of inner lateral nerve: absent

42. Spiculation of outer lateral nerve: absent

43. Hairiness of ventral furrow: absent

44. Lodicules: long collar type; shape type IV

(clasping)

45. Thousand kernel weight: 49 grams (high)

46. Shape of tip of the palea: long

 $D = \frac{\text{total spikelets}}{\text{rachis length in mm}} \times 100$

MAIL 20 1983





BELLONA (spring barley)

Authorization:

The undersigned:

CEBECO-HANDEL SRAAD

P.O. Box 182, Blaak 31

3000 AD ROTTERDAM

The Netherlands

declare that they are the owners of the new spring barley variety BELLONA.

They also declare that they authorize:

International Seeds Inc.

P.O. Box 168, 820 First Street

HALSEY, Oregon 97348

U.S.A.

to submit for and on behalf of them an application for Plant Variety Protection Certificate in the U.S.A. for the spring barley variety BELLONA,

to prepare, sign and submit the documents necessary for that purpose and

to make all attendances upon the Plant Variety Protection Board relating to the application for Plant Variety Protection Certificate for their variety BELLONA.

Rotterdam, 11th May 1984

Nationale cooperatieve aan- en verkoopvereniging voor land- en tuinbouw b.a.

CEBECO-HANDELSRAAD

(Ir. C.J. van den Bergh)

And were the sound read gradientess.

rvational agricultural co-operative wholesale society

CEBECO HANDELSRAAD

P.O. Box 182, 3000 AD Rotterdam, The Netherlands Telephone +31 10-4544911 Telex 21398 cbco nl Fax +31 10-4113889 Bank: Rabobank Nederland, Account number 30.00.00.065 Giro bank account Rabobank 5658 stating 30.00.00.065 Address: Blaak 31, 3011 GA Rotterdam

Registered No. 54,571 Rotterdam

. BY AIRMAIL

U.S. Department of Agriculture Plant Variety Rights Office PGGI Building 001, room 335, Barc-West BELTSVILLE Maryland 20705

U.S.A.

Dept:

WVDK/tg

Direct dial number:

ROTTERDAM,

4544 504

September 22, 1989

Dear Sir/Madam:

You may already know that the Plant Breeding and Seeds Departments of Cebeco-Handelsraad have integrated into the new company CEBECO ZADEN B.V.

Therefore we kindly request you to transfer all varieties, for which an application has been made or which have been entered in the name of Cebeco-Handelsraad, to the name of CEBECO ZADEN B.V.

For the sake of clarity we give you once more the full address:

CEBECO ZADEN B.V.

P.O. Box 182

3000 AD Rotterdam

the Netherlands.

Under this cover you will find a list in which we mention all varieties involved according to the latest data that we have. We shall be pleased to receive your confirmation of transfer at your earliest convenience. Any possible invoice for charges due can be sent to Cebeco Zaden BV.

Yours faithfully,

CEBECO-HANDELSRAAD

Transferrer

CEBECO ZADEN B.V.

Transferee

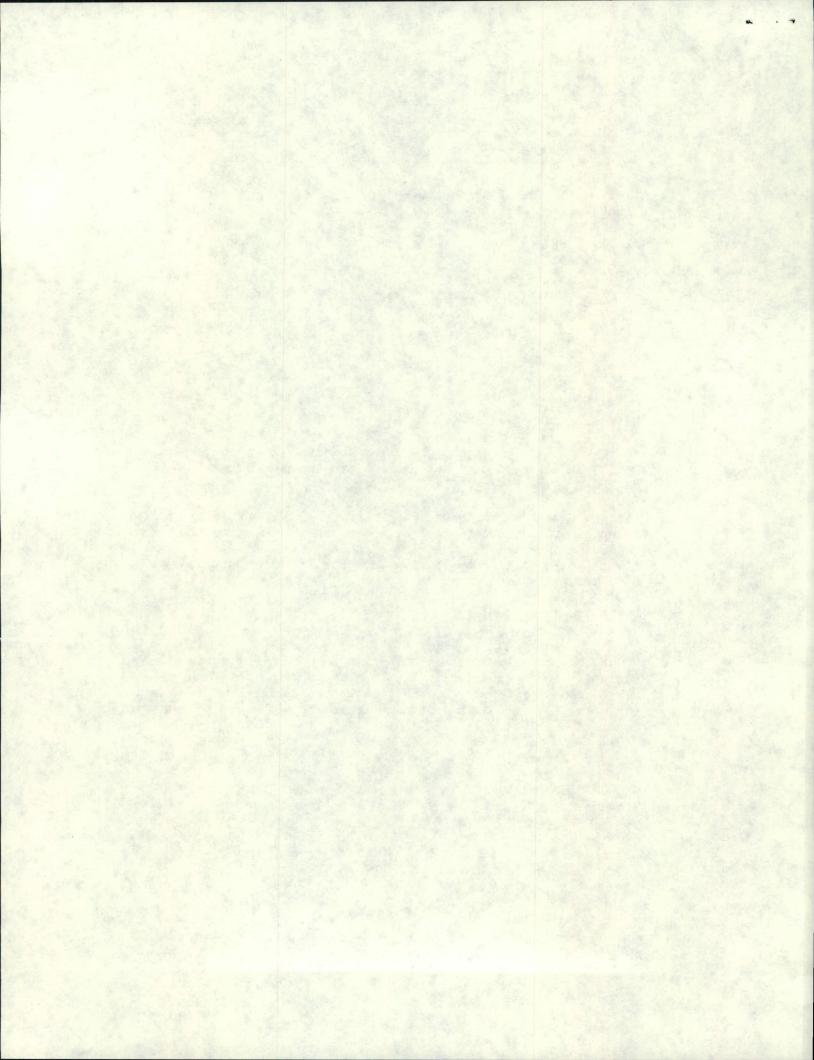
Rotterdam,

Rotterdam,

Nationale cooperatieve can en verkoopvereniging voor land en tuinbouw b.a.
CEEBCO-HANDELERAAD

CERECO ZADEN B.V.
Postous 182 . sequ. AD. Rotterdam

Enclosure





Blue pea

Varieties of Cebeco Zaden B.V. in the USA

Solara

		with PVP		
species	variety	name	date of grant	no. grant
Red fescue	Center	Center	88-01-15	8700077
Spring barley	Bellona	Bellona	85-07-26	8300085
	Apex	Apex	85-07-26	8300084
	Efron	Efron	85-10-31	8500012
Perennial ryegrass	Elka	Elka	82-02-18	8100018
White pea	Miranda	Miranda	82-10-28	8100054
	Belinda	Belinda	86-03-31	8500013
Blue pea	Ricardo	Ricardo	85-08-30	8500014
	Maxi	Maxi	83-03-24	8000016
	Othello	Othello	86-03-31	8500015
		application made		
Perennial ryegrass	EG 138	Surprise	88-12-19	8900062
Red fescue	Frc 137	Capitol		
	CRU 499	Cindy	88-12-19	8900061
	Frr 130	Claudia		
Kentucky bluegrass	Pp 112	Ampellia		
White pea	1415	Impala	89-1-26	8900081
	1416	Renata	89-04-04	8900145

Solara

88-01-29

8800056

